

AMENDMENTS TO THE CLAIMS

1 – 19 (Cancelled)

20. (Amended) The transfer switch of Claim 19-25 wherein the plunger of said solenoid engages the transfer arm at the intermediate portion thereof.

21. (Cancelled)

22. (Original) A transfer switch comprising:

 a circuit breaker housing;

 a first line terminal;

 a second line terminal;

 a load terminal;

 separable contacts electrically connected to said first line terminal;

 a transfer arm electrically connected to said load terminal and adapted to move between a first position in which said transfer arm is electrically connected to said separable contacts and a second position in which said transfer arm is electrically connected to said second line terminal;

 an operating mechanism for opening and closing said separable contacts, said operating mechanism including an operating handle to open and close said separable contacts;

 an auxiliary contact having a first state when said separable contacts are open and a second state when said separable contacts are closed; and

 means for moving said transfer arm between the first and second positions thereof, said means for moving said transfer arm including means for inputting said auxiliary contact and moving said transfer arm to the first position thereof in response to the first state of said auxiliary contact.

23. (New) A remotely controllable transfer switch comprising:

 a circuit breaker housing;

 a first line terminal;

 a second line terminal;

 a load terminal;

 separable contacts electrically connected to said first line terminal;

 a transfer arm electrically connected to said load terminal and adapted to pivot between a first position in which said transfer arm is electrically connected to said separable contacts and a second position in which said transfer arm is electrically connected to said second line terminal;

a solenoid having a first coil, a second coil and a plunger engaging said transfer arm;

a control circuit for said solenoid including a first terminal adapted to receive a first external signal, a second terminal adapted to receive a second external signal, and a third terminal adapted to receive a control voltage, said control circuit responsive to said first external signal to energize said first coil with said control voltage in order to move said plunger in a first direction to pivot said transfer arm to the first position thereof, said control circuit responsive to said second external signal to energize said second coil with said control voltage in order to move said plunger in a second direction to pivot said transfer arm to the second position thereof;

an operating mechanism for opening and closing said separable contacts; and

wherein said operating mechanism includes an auxiliary contact having a first state when said separable contacts are open and a second state when said separable contacts are closed; and wherein said control circuit includes means for inputting said auxiliary contact and moving said transfer arm to the first position thereof in response to the first state of said auxiliary contact.

24. (New) A remotely controllable transfer switch comprising:

a circuit breaker housing;

a first line terminal;

a second line terminal;

a load terminal;

separable contacts electrically connected to said first line terminal;

a transfer arm electrically connected to said load terminal and adapted to pivot between a first position in which said transfer arm is electrically connected to said separable contacts and a second position in which said transfer arm is electrically connected to said second line terminal;

a solenoid having a first coil, a second coil and a plunger engaging said transfer arm;

a control circuit for said solenoid including a first terminal adapted to receive a first external signal, a second terminal adapted to receive a second external signal, and a third terminal adapted to receive a control voltage, said control circuit responsive to said first external signal to energize said first coil with said control voltage in order to move said plunger in a first direction to pivot said transfer arm to the first position thereof, said control circuit responsive to said second external signal to energize said second coil with said

control voltage in order to move said plunger in a second direction to pivot said transfer arm to the second position thereof;

an operating mechanism for opening and closing said separable contacts; and

wherein said control circuit further includes a micro-switch having a normally open contact electrically connected in series with the first coil, a normally closed contact electrically connected in series with the second coil, and an operating member for switching said normally open contact and said normally closed contact, said normally closed contact and said normally open contact having a common terminal electrically connected to said third terminal to receive said control voltage to energize one of the first and second coils; and wherein the plunger of said solenoid has a projection which engages and actuates the operating member in the first position of said transfer arm, thereby causing said normally closed contact to open and said normally open contact to close.

25. (New) A remotely controllable transfer switch comprising:

a circuit breaker housing;

a first line terminal;

a second line terminal;

a load terminal;

separable contacts electrically connected to said first line terminal;

a transfer arm electrically connected to said load terminal and adapted to pivot between a first position in which said transfer arm is electrically connected to said separable contacts and a second position in which said transfer arm is electrically connected to said second line terminal;

a solenoid having a first coil, a second coil and a plunger engaging said transfer arm;

a control circuit for said solenoid including a first terminal adapted to receive a first external signal, a second terminal adapted to receive a second external signal, and a third terminal adapted to receive a control voltage, said control circuit responsive to said first external signal to energize said first coil with said control voltage in order to move said plunger in a first direction to pivot said transfer arm to the first position thereof, said control circuit responsive to said second external signal to energize said second coil with said control voltage in order to move said plunger in a second direction to pivot said transfer arm to the second position thereof;

an operating mechanism for opening and closing said separable contacts; and

wherein said housing includes a pivot point; wherein said separable contacts are electrically connected with a conductor; and wherein said transfer arm includes a first end, a second end and an intermediate portion therebetween, the first end having a pivot adapted for movement of the transfer arm between the first and second positions thereof, the second end having a first contact adapted for electrical connection with the conductor of said separable contacts in the first position of said transfer arm and a second contact adapted for electrical connection with the second line terminal in the second position of said transfer arm, the plunger of said solenoid moving the intermediate portion of said transfer arm.

26. (New) A remotely controllable transfer switch comprising:

a circuit breaker housing;
a first line terminal;
a second line terminal;
a load terminal;
separable contacts electrically connected to said first line terminal;
a transfer arm electrically connected to said load terminal and adapted to pivot between a first position in which said transfer arm is electrically connected to said separable contacts and a second position in which said transfer arm is electrically connected to said second line terminal;
a solenoid having a first coil, a second coil and a plunger engaging said transfer arm;

a control circuit for said solenoid including a first terminal adapted to receive a first external signal, a second terminal adapted to receive a second external signal, and a third terminal adapted to receive a control voltage, said control circuit responsive to said first external signal to energize said first coil with said control voltage in order to move said plunger in a first direction to pivot said transfer arm to the first position thereof, said control circuit responsive to said second external signal to energize said second coil with said control voltage in order to move said plunger in a second direction to pivot said transfer arm to the second position thereof;

an operating mechanism for opening and closing said separable contacts; and

wherein the control voltage has a return; wherein the first terminal is adapted for electrical connection with a first remote contact which is referenced to the return of the control voltage; and wherein the second terminal is adapted for electrical connection with a second remote contact which is referenced to the return of the control voltage.